

Amendments to the Specification:

Please replace the paragraph beginning at page 12, line 9 with the following amended paragraph:

Referring to FIG. 3, the first n entries of the ~~μIP stack~~ stack 100 are the in flight part of the μIP stack 100. In flight entries refer to entries currently being processed. The other entries are the retired part of the μIP stack. Retired entries are those that are no longer being processed.

Please replace the paragraph beginning at page 19, line 1 with the following amended paragraph:

On retirement of ms_return or ms_pop μOp instruction:

$\mu\text{RetTOS}--;$
 $-\text{OR}- \mu\text{RetTOS} = \text{stack}[\mu\text{RetTOS}].\text{BackPtr};$

where the μRetTOS pointer is decremented, or replaced with the ~~BackPtr~~ BackPtr from the entry it points to; these are equivalent. The BackPtr is implemented for the retired stack since it is used in the manipulation of μTOS (unless the rule is: if μTOS is within the retired stack, decrement; otherwise follow the BackPtr).